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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,073	12/28/2001	Chris J. Goodings	20011891	3971

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EXAMINER

DYKE, KERRI M

ART UNIT PAPER NUMBER

2616

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/035,073	Applicant(s) GOODINGS, CHRIS J.	
	Examiner Kerri M. Dyke	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-17 is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/23/2006</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Response to Arguments

2. Applicant's arguments filed 5/23/2006, with respect to claims 1-10 have been fully considered but they are not persuasive.
3. As claimed, the frame of claim 1 is non-functional descriptive material. Non-functional descriptive material has no practical application and does not gain patentability by being claimed in connection with a computer readable medium. See page 51 of the interim guidelines for further explanation.
4. Applicant's arguments, see pages 10-12, filed 5/23/2006, with respect to claims 16 and 17 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.
5. The indicated allowability of claims 11-14 is withdrawn in view of the newly discovered reference(s) to Horvat et al. (US 2006/0120333). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1-10 are directed to frame formats. As currently claimed the frames are non-functional descriptive material, which is not patentable. Data structures not

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claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). If the frame is interpreted as a signal, it is still unstatutory because claims that recited nothing but the physical characteristics of a form of energy, define energy and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, a claim reciting a signal encoded with functional descriptive material does not fall within any of the categories set forth in 101. The patentability guidelines can be found at the office website at: http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf. Annex IV, beginning on page 50, is the computer related section.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 6-9, and 11-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Horvat et al. (US 2006/0120333).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C.

102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the

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inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

4. In regards to claim 1, Horvat discloses a time division duplex data frame embodied in a computer readable medium and utilized within a wireless frequency hopping digital communications environment (paragraph 27 and fig 5. element 14. The base station is controlled by a processor and can be considered a computer. The frame is read by the base station and therefore must be in a computer readable medium.). Figure 4 slots 7 and 11 are primary send/receive blocks. Slots 9 and 13 are redundant send/receive blocks.

5. In regards to claim 6, Horvat discloses the data frame of claim 1, in which the second block of data is only transmitted if the quality of communications within the wireless frequency hopping communications system fails to satisfy a predetermined quality threshold (p. 30).

6. In regards to claim 7, Horvat discloses the data frame of claim 6, in which the predetermined quality threshold is a maximum bit error rate (p. 30).

7. In regards to claim 8, Horvat discloses the data frame of claim 1, in which the fourth block of data is only received if the quality of communications within the wireless frequency hopping communication system fails to satisfy a predetermined quality threshold (p. 30).

8. In regards to claim 9, Horvat discloses the data frame of claim 8, in which the predetermined quality threshold is a maximum bit error rate (p. 30).

9. In regards to claim 11, Horvat discloses a method for communicating data between a first device and a second device via a wireless frequency hopping digital communications link (paragraph 0027), which method is comprised of the steps of: transmitting a first block of data from the first device to the second device during a first data frame period where the first block of

data has not been previously transmitted (paragraphs 0034-0035, fig. 4 slot 7); transmitting a second block of data from the first device to the second device during the first data frame period, where the second block of data was also transmitted by the first device during the data frame period immediately preceding the first data frame period (p. 0034-0035, fig. 4 slot 9).

10. In regards to claim 12, Horvat discloses the method of claim 11, which method further comprises the steps of: transmitting a third block of data from the second device to the first device during the first data frame period where the third block of data has not been previously transmitted (fig. 4 slot 11); transmitting a fourth block of data from the second device to the first device during the first data frame period, where the fourth block of data was also transmitted by the second device during the data frame period immediately preceding the first data frame period (fig 4. slot 13).

11. In regards to claim 13, Horvat discloses a method for communication data between a first device and a second device via a wireless frequency hopping digital communications link (p. 27) where the communication are divided into a plurality of data frames (fig. 4), which method is comprised of the steps of: transmitting at least one data block within each frame from the first device to the second device, where each data block is transmitted one time (p. 28); determining that a first data block and a second data block from the first device to the second device within each frame, the first data block containing data that has not been previously transmitted from the first device to the second device, the second data block containing data that was also transmitted from the first device to the second device during the preceding frame (p. 34-35).

12. In regards to claim 14, Horvat discloses the method of claim 13, in which the step of determining that the quality of communications link fails to satisfy a predetermined criterion is

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further comprised of the substeps of: measuring a bit error rate of data transmitted on the communications link; determining that the bit error rate exceeds a predetermined maximum acceptable level (p. 30).

Allowable Subject Matter

11. Claims 15-17 are allowed.

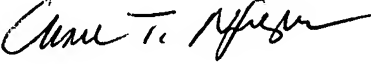
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kerri M. Dyke whose telephone number is (571) 272-0542. The examiner can normally be reached on Monday through Thursday, 7:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

kmd


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